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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/993,251	11/19/2001	Houliang Li	10541-1161	7761

7590

05/29/2003

Steven L. Oberholtzer
BRINKS HOFER GILSON & LIONE
P.O. Box 10395
Chicago, IL 60610

EXAMINER

ROSENBAUM, IRENE CUDIA

ART UNIT	PAPER NUMBER
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3726

DATE MAILED: 05/29/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/993,251

Applicant(s)

LI ET AL.

Examiner

Irene Cuda-Rosenbaum

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

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Specification

The specification is replete with spelling and grammatical errors. For example, page 1, paragraph 4, line 1, "way" should be --ways--. Paragraph 5, line 1, "know" should be --known-- and line 2, "techniques" should be --technique--. A careful review and revision of the entire specification is required.

Claim Rejections - 35 USC § 102

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-4, 6-7, 9-11-14 and 16-17 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by JP 200317533.

See the translation, in particular the last line of the first page through the next paragraph on the following page and figures 3-5.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 5, 12 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP '533 in view of Massee (5,775,151).

JP '533 teaches a method of forming an oblique end portion of a catalytic converter essentially as claimed but lacks a teaching of dividing up the end portion into imaginary planes perpendicular to the central axis forming a contour corresponding to

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the imaginary planes and programming the roller to follow the contour . However, Massee teaches that it is old and well known in the spin forming art to measure data corresponding to the desired roller movement and storing that in a memory of a control unit, then controlling the movement of the roller by the control unit. (see the abstract line 6-17) . It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of spin forming a cylinder as taught by JP'533 by controlling the roller movement as claimed, since to use input data based on desired contours is old and well known in the art as taught by Massee for the purpose of automating the process

Claims 13 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP'533 in view of Irie (6,067,833)

JP'533 teaches the method essentially as claimed but lacks a teaching of rotating the roller around an axis perpendicular to the central axis. Instead, JP'533 rotates his roller parallel to the central axis. However, Irie teaches a spin forming process in which the roller is rotated around an axis perpendicular to the central axis. It would have been obvious to one of ordinary skill in the art to change the rolls of JP'533 to rotate in a perpendicular axis rather than a parallel axis , since either way is known and it is merely a matter of how the spin forming apparatus is set up and does not materially effect the process.

Claim 8, 15 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP'533.

JP'533 teaches the method of making a catalytic converter essentially as claimed but lacks a teaching of cutting an end to make it angled. However, to cut the ends to shape is old and well known in the art and Official Notice is taken of such.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 16 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 16, line 9 is confusing in that it is repeated on the next line. Correction is required.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Irene Cuda-Rosenbaum whose telephone number is 703-308-1792. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tom Hughes can be reached on 308-1148. The fax phone numbers for the organization where this application or proceeding is assigned are 7033087058 for regular communications and 7033087058 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 308-1148.

ICR
May 22, 2003

John M.
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